

United States Environmental Protection Agency Washington, DC 20460

Notice of Arrival of Pesticides and Devices

Send Completed Form to Appropriate Regional Office Listed in the Instructions for this Form.

OMB Control No. 2070-0020 Approval Expires 11/30/2016

Note: Read Instructions before completing form.

Note: Nead mondadions be	Joinpie	9 .01111.					
	Part I: To	o Be Co	mpleted by Importer of	Record or Licensed Custor	ns Broker		
Name and Complete Address of Licensed Customs Broker			toms Broker	Name and Complete Address of Importer of Record			
Expeditors International Attn. Brynn Wisz 849 Thomas Drive				Nufarm Americas Inc. 11901 South Austin Avenue Alsip, IL 60803 T:708-377-1330			
Return Form to this Address				Return Form to this Address			
Name and Complete Address of Shipper				EPA Registration Number	5. EPA Producer Establishment No.		
Sichuan Leshan Fuhua Tongda Agro Chemical Tech Co. Ltd.				35935-46 83807-CHN-001 6. Brand Name of Product			
Qiaogou Road Wutoniqiao District Leshan City, Sichuan, China 614800				GLYPHOSATE ACID T	FECHNICAL		
7. Active Ingredients and	Percentage	of Each					
N-(phospho	nome	ethyl)	glycine 95%				
8. Unit Size	9. Quantity		10. Total Net Weight	11. Country of Origin			
1,000 KG	486		486,000 Kgs				
12. Port of Entry		*		13. Name and Complete Address	of Carrier		
Chicago, I	llinois	3		Hanjin Long Beach			
14. Entry Number		15. Anti	cipated Entry Date				
231-8003759-4		1/31/1	4				
17. Location of Goods for Examination after Importation Chicago, IL			portation	I assert that information constituting Confidential Business Information is shown in the above blocks numbered: (Note: Blocks 4, 5, 6, 7 are not entitled to CBI treatment–see Instructions)			
			EPA Registration Number (Ti tional information as indicate		but may expedite processing of the Notice		
☐ 18a. A pesticide trans	sferred betw	een regist	ered establishments operated	d by the same producer. Domestic F	Producer Establishment Number:		
☐ 18c. A pesticide dist☐ 18d. A pesticide dist☐ 18e. A pesticide trar☐ 18f. A pesticide dist☐ 18g. A pesticide trar☐ 18g. A pesticide trar☐ 18g. A pesticide trar	EPA F ributed unde tributed for re nsferred sole ributed unde nsferred for t	Registration ran Expensesearch are lessearch are lessearch are lessearch are lessearche an emergient an emerg	n Number of Product being F rimental Use Permit. Experin nd development purposes wit ort. Domestic Producer Estab gency exemption. Emergency es of disposal.	ormulated, if applicable: nental Use Permit Number: hout an Experimental Use Permit. lishment Number: r Exemption Number:	··		
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19. Remarks (Provide additional information he	re. It is recommended that a c	copy of the label affixed to the product be	submitted with the NOA.).
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I certify that the statements I have made knowingly false or misleading statement	on this form and all attachme may be punishable by fine or	ents thereto are true, accurate, and comple imprisonment or both under applicable la	ete. i acknowledge that any tw
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20. Printed Name of Importer of Record or Licensed Customs Broker	Telephone Number	21. Signature of Importer of Record or Customs Broker	Licerised Date Signed
	708-377-1363	Customs Brokery Wan Win	4 1/2/11/
Susan Wright	. 55 577 1000	y routh way	1/00/19
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Part II: To	Be Completed by U.S. i	Environmental Protection Agenc	У
Action to he taken by It S. Cristers and S.	Protection		
Action to be taken by U.S. Customs and Border	TOCCOUNT		
Release Shipment	Detain for inspection		gnee under bond. Shipment must
		be held intact pending inspe	ection.
Other (Specify)			
Remarks			, , , , , , , , , , , , , , , , , , ,
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Signature and Title of EPA Official	1 .	, 1	Date
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	Be Completed by U.S.	Customs and Border Protection	<u> </u>
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was handled as instructed by EPA in Pa		be brought to the attention of EPA before	
should also be noted in "Remarks."			
Remarks			
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Signature of District Director of Customs			Date
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Paperwork Reduction Act Notice: The est comments regarding the burden estimate of			
Division, Office of Environmental Inform			
Avenue, NW, Washington, DC 20460. Inc			

GLYPHOSATE TECHNICAL

95.0% 100.0% EPA Est. No. 83807-CHN-001 N-(p**ha**sphonomethy!)glycine EPA Reg. No. 35935-46 OTHER INGREDIENTS: ACTIVE INGREDIENT:

KEEP OUT OF REACH OF CHILDREN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.) SEE BELOW FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Medical Emergencies Only, Call (877) 325-1840 For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. HARMFUL IF INHALED. Do not get in eyes or on clothing. Avoid breathing dust. Wear goggles or face shield. Wash throughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash before reuse.

		FIRST AID
IF IN EYES	·	Hold eye open and rinse slowly and gently with water for 15
	_	to 20 minutes.
	•	Remove contact lenses, if present, after the first 5 minutes,
		then continue rinsing eye.
	•	Call a poison control center or doctor for treatment advice.
IF SWALLOWED	٠	Call a poison control center or doctor immediately for
		treatment advice.
	٠	Have person sip a glass of water if able to swallow.
	•	Do not induce varniting unless told to do so by the poison
		control center or doctor.
-	•	Do not give anything by mouth to an unconscious person.
IF INHALED	•	Move person to fresh air.
	•	If person is not breathing, call 911 or an ambulance, then
		give artificial respiration, preferably by mouth-to-mouth, if
		possible.
	•	Call a poison control center or doctor for further treatment
		advice.
		TOT IN NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

You may also contact 1-877-325-1840 for emergency medical treatment information.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric avage.

ENVIRONMENTAL HAZARDS

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, coeans, or other waters unless this product ins specifically identified and addressed in an atlational Polithage Effirmation System (NPDES) permit. Do not discharge effluent containing this product into sever systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

PHYSICAL OR CHEMICAL HAZARDS Solutions of this product should be mixed and stored using only stainliess steel, aluminum, fiberglass, plastic and plastic-lined containers.

DO NOT MIX, STORE OR UTILIZE THIS PRODUCT OR SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS

FOR MANUFACTURING USE ONLY such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted olgarette or STEEL) CONTAINERS OR TANKS. This product or solutions of this product react with

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read the entire label before using this product.

Use only for the manufacturing or formulating of, or repackaging as, an herbicide for use in the following crops: Crop Groups 1, 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,18,20 acrolds, aloe vera; ambarella; aspenagus; attemoya; avocadic benfroo; barana; belehult, britata, birheb; braddfult; buffalo gourd; cacao (cocoa) bean; cadus; canistel; carnola; carambola (starfurit); charg; cherimoya; coconut; coffee; corn; cotton; cranbery; crambe; carambolae; dates; dokudami; durian; epazde; feljoz, figs; flax; galangai; globe artichoke; Governor's plum; gow kee; grapes (raish, table, wine); guava; hops; llama; imbe; imbe; imbu; intigronbery; craw kee; grapes (raish, table, wine); guava; hops; llama; marmaladebox (genip); meadowfoam; migga; mountain papaya; mustigot; on mangosteen; marmaladebox (genip); meadowfoam; migga; mountain papaya; apple; mustigot; payand; papaya; passionfruit; pattue grasses; pawpaw; mulberry); okra; olive; oregano; palm; papaya; passionfruit; pattue grasses; pawpaw; papanit; papele; pulasan; quinoa; rambutan; rape; rose apple; safflower; salai; sapode (black, manay, white); sesamic; sorghum (milo); sourago; soybean; Spanish ime; speamint; star apple; steamic; strawbeny; sugar apple; sugarcane; sunflower; Surfam cheny; tamafind; taa; teff; ti; ugli fruit; wasab; water spinach; watercress; wax jambu; yacon.

For use in the following glyphosate-tolerant crops: Roundup Ready Alfalfa; Roundup Ready Canola (Winter Varieties); Roundup Ready Canola (Winter Varieties); Roundup Ready Corn.; Roundup Ready Com 2: Held Con Hybrids with Roundup Ready 2 Technology; Roundup Ready Cotton; Roundup Ready 2 Soppean; Roundup Ready 2 Yield Sopbean; Roundup Ready 2 Yield Sopbean; Roundup Ready Sweet Corn; Sweet Corn Hybrids with Roundup Ready 2 Technology.

For the following uses: bermudagrass release, broadcast and spot weed control; For the following uses: bermudagrass release, broadcast and spot injection and fill, time-and-entical mowing; cut stump application; hollow stem thjection and fill, time and-edge, fulfgass renovation; alleys. Hares, traits & access roads, apartment following sites; allrifleds; airports; alleys. Hares, traits & access roads, apartment following sites; allrifleds; airports; alleys. Hares, traits & access roads, apartment complexes, aquatio sites; anound commercial or indistrial structures or outbuildings; commercial isses; organization sites; CRP land; dieth back; domained in the manufactures and outbuildings; around onnamental gardens; around construction sites; CRP land; dieth back; domained; demoses, gravel yards; habitat restoration & management areas; highways & coasticides courses; gravel yards; habitat restoration & management areas; highways & coasticides courses; gravel yards; habitat restoration & management areas; highways & coasticides areas; landscape areas; lumber yards; mulched areas; inalural areas; industrial energy and onnamentals production sites; mursefies; particip areas and traits; particip areas; particip areas; particip area and traits; particip areas; particip area and traits; sinch, vine, and onnamental plants; railroad inflused vine; railroad increas and ornamental plants; railroad inflused vine; public areas: refineries, residential sites; resorts, rightis-of-wey, roadsides; schools; sidewalks, sports areas; sports complexes; storage areas; substations; termis courts; furt and grass seed production; utility sites; uncropped farmstead areas; uncultivated non-agricultural areas; vacant lots; walkways; wastelands; wildlife food plots; walkile habitat areas; woody brush and trees; and other related sites.

This product may be used to formulate products for any additional uses not listed on this label if the formulator, user group, or grower has compiled with U.S. EPA data tabel if the formulator, user group, or grower has comp submission requirements regarding the support of such use(s).

This product may be formulated for products to be used for experimental purposes that are in compliance with FIFRA.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Keep container closed to prevent false and contamination.

PESTICIDE STORAGE: Keep container closed to prevent states inneversible eye damage and may be danage. Inneversible eye damage and may be danage. In the state of this product may cause inneversible eye damage and read as a disposal of excess pesticide or rinsale is a violation of read and in the final law. If these wastes annot be disposed of by use according to the label instructions, contact your. State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING AND DISPOSAL: (This product is available in multiple containers. Follow the container disposal instructions below that apply to your container.

Norrefillable Containers Without Outer Bag: Norrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into processing equipment, then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities, by burning. If burned stay out of smoke.

Nonrefillable Containers With Outer Bag: Nonrefillable container. Do not rause or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into processing equipment, then dispose of liner in a senitary landill or by incineration if allowed by state and local authorities, by burning. If burned stay out of smoke. Offer the outer bag for recycling, if available.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT
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FURNISHED. "As IS" BY MANUEACURER ON SELLER AND (2) MANUFACTURER
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ANY KIND TO BLYPER OR USE, EITHER EXPRESS OR MINITED, OR BY
USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE
PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY
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FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES,
BNCLUDING BUT NOT LIMITED TO INFFECTIVENESS, MAY RESULT BEOAUSE OF
SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED
IN COMBINATION WHAT THE GOODS, OR THE MANNER OF USE OR APPLICATION
IN COMBINATION WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF
MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER.
BLYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF
MANUFACTURER OR SELLER, HAS ANY AUTHORITY TO MAKE ANY
REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL NANUFACTURER OR SELLER BE LABLE FOR SPECKAL, NICIDENTAL, OR CONSEQUENTAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF CONSEQUENTAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PROMALITIES RELATING TO THE GOODS SOLD, NICLUDING USE, APPLICABLE LAW, MANUFACTURER OF SELLER SHALL NOT BE LABLET WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LABLET OF HUYER OR TO CUSTOMERS OF BUYER, IF BY WAY OF INDEMNIFICATION TO BUYER OF MONEY, CLAIMS ON TO THE MASSON OF, OR RISING OUT OF THE MISUSE OR FAILURE TO FOLLOW HABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ALL SUNS OF HOSE SASURED SASURED. CONSISTENT WHA APPLICABLE LAW, SUVER'S OF USER'S SHALL BE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OF USER'S EXCLUSIVE REMEDY, CONSISTENT WHAT APPLICABLE LAW, BUYER'S OF USER'S EXCLUSIVE REMEDY. AND MANUFACTURER'S OR SELLER'S TOTAL LI NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of the directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be retunded.

(RV091713)

MADE IN CHINA

NET WEIGHT: 2204.6 LB (1000 KG)

4020 Aerial Center Parkway, Morrisville, NC 27560 **NUFARM LIMITED** Manufactured For





For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night: 1-800-424-9300. For Medical Emergencies Only, Call 1-877-325-1840.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:

Glyphosate Technical NUP-07163

Synonyms:

Glyphosate; N-(phosphonomethyl) glycine

EPA Reg. No.:

35935-46

Company Name:

Nufarm Limited

4020 Aerial Center Parkway Morrsiville, NC 27560

Date of Issue:

December 11, 2013

Supersedes: October 21, 2011

Sections Revised:

2. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance and Odor: White solid with slight odor.

Warning Statements: Keep out of reach of children. DANGER. CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. HARMFUL IF INHALED. Do not get in eyes or on clothing. Avoid breathing dust. Wear goggles or face shield. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash before reuse.

Potential Health Effects:

Likely Routes of Exposure: Eye and skin contact.

Eye Contact: Causes substantial but temporary eye injury.

Skin Contact: Slightly toxic based on toxicity studies.

Ingestion: Slightly toxic based on toxicity studies. No significant adverse health effects are expected to develop if only small amounts (less than a mouthful) are swallowed.

Inhalation: Low inhalation toxicity. Inhalation of dusts may cause coughing and sneezing.

Medical Conditions Aggravated by Exposure: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

See Section 11: TOXICOLOGICAL INFORMATION for more information.

Potential Environmental Effects: Available data on similar formulations suggest that this product would be slightly to moderately toxic to aquatic organisms and practically non-toxic to avian species, honeybees and earthworms.

See Section 12: ECOLOGICAL INFORMATION for more information.

3. COMPOSITION / INFORMATION ON INGRÉDIENTS

COMPONENT N-(phosphonomethyl) glycine Other Ingredients

CAS NO.

% BY WEIGHT

1071-83-6

95.0

5.0

4. FIRST AID MEASURES

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

If on Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

Flash Point: Not applicable

Autoignition Temperature: Not applicable

Flammability Limits: Not applicable

Extinguishing Media: In case of fire, use water (flood with water), dry chemical, carbon dioxide, or alcohol foam.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later. This product reacts with galvanized steel or unlined steel (except stainless steel) to produce hydrogen gas that may form a highly combustible gas mixture which could flash or explode.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as oxides of carbon, nitrogen, and phosphorous.

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 2 Flammability: 0 Reactivity: 0

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: If dry, sweep or scoop up material and place into container for disposal. If wet, pump any free liquid into an appropriate closed container. Wash area with strong industrial detergent and water, absorb and sweep into container for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

Handling:

Do not get in eyes or on clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Solutions of this product should be mixed and stored using only stainless steel, aluminum, fiberglass, plastic or plastic-lined containers. DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

Storage:

Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Keep container closed to prevent spills and contamination.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear face shield, goggles or safety glasses with front, brow and temple protection. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes and chemical-resistant gloves. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

		HA ·	i AC	GIH	
Component	TWA	STEL	TWA	STEL	Unit
Glyphosate	NE	NE	NE	NE	

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: White solid with slight odor.

Boiling Point:

Evaporation Rate:

Decomposes @ 200°C

Density:

1.66 g/cc

Not applicable Not applicable

Freezing Point: pH:

2.14 (1% solution)

Solubility in Water:

Soluble

Specific Gravity: Vapor Density:

Not determined Not applicable

Vapor Pressure:

Not applicable

Viscosity:

Not applicable

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal handling and storage conditions.

Conditions to Avoid: Excessive heat. Do not store near heat or flame.

Incompatible Materials: Strong oxidizing agents: bases and acids. This product reacts with galvanized steel or unlined steel (except stainless steel) to produce hydrogen gas that may form a highly combustible gas mixture which could flash or explode.

Hazardous Decomposition Products: Under fire conditions, may produce gases such as oxides of carbon, nitrogen, and phosphorous.

Hazardous Reactions: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicological Data for Glyphosate Technical

Data from laboratory studies conducted on a similar, but not identical, formulation:

Oral: Rat LD50: >5,000 mg/kg

Dermal: Rabbit LD₅₀: >5,000 mg/kg

Eye Irritation: Rabbit: Moderately to severely irritating.

Skin Irritation: Rabbit: Non-irritating

Subchronic (Target Organ) Effects: Repeated overexposure to glyphosate may decrease body weight gains and effects to liver.

Carcinogenicity / Chronic Health Effects: Prolonged overexposure to glyphosate may cause effects to the liver. There was no evidence of carcinogenicity in animal studies using glyphosate. EPA has given glyphosate a Group E classification (evidence of non-carcinogenicity in humans).

Reproductive Toxicity: In laboratory animal studies with glyphosate, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

Developmental Toxicity: In animal studies, glyphosate did not cause birth defects in animals; other effects were seen in the fetus only at doses which caused toxic effects to the mother.

Genotoxicity: Glyphosate has produced no genetic changes in a variety of standard in vitro (bacterial cells) and in vivo tests using animals.

Assessment Carcinogenicity: None listed with ACGIH, IARC, NTP or OSHA.

See Section 2: HAZARDS IDENTIFICATION for more information.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Data on Glyphosate Technical:

96-hour LC₅₀ Bluegill:

120 mg/l

Bobwhite Quail 8-day Dietary LC₅₀:

>4.500 ppm

96-hour LC₅₀ Rainbow Trout:

86 mg/l

Mallard Duck 8-day Dietary LC50:

>4,500 ppm

48-hour LC₅₀ Daphnia:

780 mg/l

Environmental Fate:

In the environment glyphosate adsorbs strongly to soil and is expected to be immobile in soil. Glyphosate is readily degraded by soil microbes to AMPA (aminomethyl phosphonic acid) that is further degraded to carbon dioxide. Glyphosate and AMPA are unlikely to enter ground water due to their strong adsorptive characteristics. Terrestrially-applied glyphosate has the potential to move into surface waters through soil erosion because it may be adsorbed to soil particles suspended in the runoff. Aquatic applications registered for certain formulations may also result in glyphosate entering surface waters. Complete degradation is slow, but dissipation in water is rapid because glyphosate is bound in sediments and has low biological availability to aquatic organisms. These characteristics suggest a low potential for bioconcentration in aquatic organisms and this has been verified by laboratory investigations of glyphosate bioconcentration in numerous marine and freshwater organisms with and without soil. The maximum whole body bioconcentration factors for fish were observed to be less than 1X. Bioconcentration factors for sediment dwelling mollusks and crayfish tended to be slightly higher, but were always less than 10X. In addition, any residues accumulated in organisms were rapidly eliminated.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with application Federal, state or local procedures.

Container Handling and Disposal:

Nonrefillable Containers Without Outer Bag: Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into processing equipment, then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities, by burning. If burned stay out of smoke.

Nonrefillable Containers With Outer Bag: Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into processing equipment, then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities, by burning. If burned stay out of smoke. Offer the outer bag for recycling, if available.

Refillable Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with pump 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. An empty container retains product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. Completely empty package into formulation equipment. This package may be returned for refilling with this product. If not refilled, dispose of empty package in a sanitary landfill or by incineration as applicable.

14. TRANSPORTATION INFORMATION

DOT: Not Regulated

IMDG: Not Regulated

IATA: Not Regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations:

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370): Immediate

Section 313 Toxic Chemical(s): None

Reportable Quantity (RQ) under U.S. CERCLA: None

RCRA Waste Code: None

State Information:

Other state regulations may apply. Check individual state requirements.

California Proposition 65: Not listed

16. OTHER INFORMATION

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

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